

**DECLARATION  
AND POWER OF ATTORNEY  
Original Application**

As a below named inventor, I declare that the information given herein is true, that I believe that I am the original, first and sole inventor if only one name is listed at 1 below, or a joint inventor if plural inventors are named below, of the invention entitled:

## A MEMORY ACCESS SYSTEM

which is described and claimed in:

the attached specification or  the specification in application  
Serial No. 09/395,295, filed 9/13/99  
(for declaration not accompanying appl.)

that I do not know and do not believe that the same was ever known or used in the United States of America before my or our invention thereof or patented or described in any printed publication in any country before my or our invention thereof, or more than one year prior to this application, or in public use or on sale in the United States of America more than one year prior to this application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application, that I acknowledge my duty to disclose information of which I am aware which is material to patentability in accordance with 37 CFR §1.56. I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I hereby claim the priority benefits under 35 U.S.C. 119 of any application(s) for patent or inventor's certificate listed below. All foreign applications for patent or inventor's certificate on this invention filed by me or my legal representatives or assigns prior to the application(s) of which priority is claimed are also identified below.

PRIOR APPLICATION(S), IF ANY, OF WHICH PRIORITY IS CLAIMED

<u>COUNTRY</u>	<u>APPLICATION NO.</u>	<u>DATE OF FILING</u>
United Kingdom	9916564.9	14 July 1999

ALL FOREIGN APPLICATIONS, IF ANY, FILED PRIOR  
TO THE APPLICATION(S) OF WHICH PRIORITY IS CLAIMED

COUNTRY      APPLICATION NO.      DATE OF FILING

**POWER OF ATTORNEY:**

As a named inventor, I hereby appoint the following attorney(s) and/or agents(s) to prosecute this application and transact all business in the Patent and Trademark office connected therewith: Gordon D. Coplein #19,165, William F. Dudine, Jr. #20,569, Michael J. Sweedler #19,937, S. Peter Ludwig #25,351, Paul Fields #20,298, Harold E. Wurst #22,183, Joseph B. Lerch #26,936, Melvin C. Garner #26,272, Ethan Horwitz #27,646, Beverly B. Goodwin #28,417, Adda C. Gogoris #29,714, Martin E. Goldstein #20,869, Bert J. Lewen #19,407, Henry Sternberg #22,408, Robert A. Green #28,301, Peter C. Schechter #31,662, Robert Schaffer #31,194, Robert C. Sullivan, Jr. #30,499, Ira J. Levy #35,587, Joseph R. Robinson #33,448

all of the firm of DARBY & DARBY P.C., 805 Third Avenue, New York, NY 10022

SEND CORRESPONDENCE TO:

DARBY & DARBY P.C.  
805 Third Avenue  
New York, NY 10022

DIRECT TELEPHONE CALLS TO:

MELVIN C. GARNER  
212-527-7700

FULL NAME AND RESIDENCE OF INVENTOR 1

LAST NAME: WILSON

FIRST NAME: Sophie

MIDDLE NAME:

CITY: Cambridge

STATE OR FOREIGN COUNTRY: ENGLAND

COUNTRY OF CITIZENSHIP: ENGLAND

POST OFFICE ADDRESS: 6 Willow Grove, Lode

CITY: Cambridge

STATE OR COUNTRY: ENGLAND ZIP CODE: CB5 9EL

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

SIGNATURE OF INVENTOR 1:

*Sophie Wilson*

DATED: 25 Nov 99

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Sophie WILSON

Appl. No. *To Be Assigned*  
(Continuation of Appl. No. 09/395,295;  
Filed: September 13, 1999)

Filed: *Herewith*

For: **A Memory Access System**

Confirmation No. *To Be Assigned*

Art Unit: *To Be Assigned*

Examiner: *To Be Assigned*

Atty. Docket: 1875.5330001

**Revocation of Prior Power of Attorney and Appointment of New  
Attorneys of Record**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

The undersigned, having express authority to represent **Broadcom Corporation**, the assignee of the entire right, title, and interest in the above-captioned application, by assignment filed at the U.S. Patent and Trademark Office (copy enclosed), hereby revokes all powers of attorney heretofore given in the above-captioned application and appoints as his attorneys James D. Bennett, Registration No. 37,550; Jeffrey DeRoy Wheeler, 39,066; Noel Benjamin Whitley, 42,225; and Harry Shannon Tyson, Jr., 42,193 and the attorneys associated with Customer Number 28393, those attorneys currently being: Robert Greene Sterne, Esq., Registration No. 28,912; Edward J. Kessler, Esq., Registration No. 25,688; Jorge A. Goldstein, Esq., Registration No. 29,021; Samuel L. Fox, Esq., Registration No. 30,353; David K.S. Cornwell, Esq., Registration No. 31,944; Robert W. Esmond, Esq., Registration No. 32,893; Tracy-Gene G. Durkin, Esq., Registration No. 32,831; Michele A. Cimbala, Esq., Registration No. 33,851; Michael B. Ray, Esq., Registration No. 33,997; Robert E. Sokohl, Esq., Registration No. 36,013; Eric K. Steffe, Esq., Registration No. 36,688; Michael Q. Lee, Esq.,

Sophie WILSON

Appl. No. *To Be Assigned*

(Continuation of Appl. No. 09/395,295; Filed September 13, 1999)

Registration No. 35,239; Steven R. Ludwig, Esq., Registration No. 36,203; John M. Covert, Esq., Registration No. 38,759; Linda E. Alcorn, Esq., Registration No. 39,588; Lawrence B. Bugaisky, Esq., Registration No. 35,086; Donald J. Featherstone, Esq., Registration No. 33,876; Robert C. Millonig, Esq., Registration No. 34,395; Michael V. Messinger, Esq., Reg. No. 37,575; Judith U. Kim, Esq., Reg. No. 40,679; Timothy J. Shea, Jr., Esq., Reg. No. 41,306; and Patrick E. Garrett, Esq., Reg. No. 39,987. with full power of substitution, association, and revocation, to prosecute said application and to transact all business in the United States Patent and Trademark Office connected therewith.

The undersigned hereby grants said attorneys the power to insert on this Power of Attorney any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

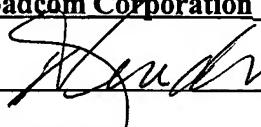
Send all correspondence to:

Customer Number 26111

**STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.**  
1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934.

Direct telephone calls to (202) 371-2600.

FOR: Broadcom Corporation

SIGNATURE: 

BY: Dee Henderson

TITLE: Manager, Intellectual Property Portfolio

DATE: October 22, 2003

**STATEMENT UNDER 37 C.F.R. § 3.73(b)**Applicant/Patent Owner: Br adcom Corp rationApplication No./Patent No.: To Be Assigned Filed/Issue Date: HerewithEntitled: A Memory Access System

Broadcom Corporation, a Corporation  
 (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)  
 states that it is:

1.  the assignee of the entire right, title, and interest, or
2.  an assignee of less than the entire right, title and interest.  
 The extent (by percentage) of its ownership interest is \_\_\_\_\_ % in the patent application/patent identified above by virtue of either:

A.  An Assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel 012156, Frame 0623, or for which a copy thereof is attached.

***OR***

B.  A chain of title from the inventor(s) of the patent application/patent identified above to the current assignee as shown below:

1. From: Broadcom UK LTD To: Broadcom Corporation  
 The document was recorded in the Patent and Trademark Office at Reel 012156, Frame 0623, or for which a copy thereof is attached.
2. From: Element 14, Inc. To: Broadcom UK LTD  
 The document was recorded in the Patent and Trademark Office at Reel 012185, Frame 0462, or for which a copy thereof is attached.
3. From: Sophie WILSON To: Element 14, Inc.  
 The document was recorded in the Patent and Trademark Office at Reel 010847, Frame 0135, or for which a copy thereof is attached.

Additional documents in the chain of title are listed on a supplemental sheet.

Copies of assignments or other documents in the chain of title are attached.

NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302.8]

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

October 22, 2003

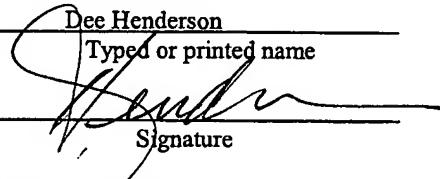
Date

(949) 926-5958

Telephone number

Dee Henderson

Typed or printed name



Signature

Manager, Intellectual Property Portfolio

Title

DO NOT FORWARD  
TO ASSIGNMENT BRANCH  
NOT FOR RECORDATION

1073/0G118

## ASSIGNMENT

Sophie WILSON, a citizen of England; residing at 6 Willow Grove, Lode, Cambridge CB5 9EL, ENGLAND;

(hereinafter called "ASSIGNOR") in consideration of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to me by Element 14 Inc whose registered office is at 15 East North Street, PO Box 899, City of Dover, County of Kent, Delaware 19901, U.S.A. (hereinafter called the "ASSIGNEE"), do hereby sell and assign to the said ASSIGNEE, its successors and assigns, all their right, title and interest, in and for the United States of America, in and to my invention entitled:

### **A MEMORY ACCESS SYSTEM**

invented by me and described in the application Serial No. 09/395,295 for United States Letters Patent therefor, executed on \_\_\_\_\_, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by said ASSIGNEE, its successors, assigns or other legal representatives, to the full end of the term for which said Letters patent may be granted, as fully and entirely as the same would have been held and enjoyed by said ASSIGNOR if this assignment and sale had not been made;

And ASSIGNOR hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of said above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute divisional renewal or reissue applications, or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said ASSIGNEE;

And the said ASSIGNOR hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said ASSIGNEE.

I declare under penalty of perjury under the laws of the United States of America that I have signed this document as my own free act and that all of the foregoing is true and correct.

Dated: 1 Dec 97

Sophie Wilson  
Sophie WILSON, Inventor

Jan. 18, 2001 2:54PM

WILSON SONSINI

No. 3933 P. 4

State of Delaware  
Office of the Secretary of State

PAGE 1

DO NOT FORWARD  
TO ASSIGNMENT BRANCH  
NOT FOR RECORDATION

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "ELEMENT 14, INC.", CHANGING ITS NAME FROM "ELEMENT 14, INC." TO "BROADCOM UK LTD.", FILED IN THIS OFFICE ON THE SIXTEENTH DAY OF JANUARY, A.D. 2001, AT 9 O'CLOCK A.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



Harriet Smith Windsor  
Secretary of State

3024289 8100

AUTHENTICATION: 0917383

010024487

DATE: 01-16-01

BETWEEN:

- 1 BROADCOM UK Ltd a Delaware corporation having its principal office at Suite 210, The Quorum, Barnwell Road, Cambridge, CB5 8RE ("the Assignor"); and
- 2 BROADCOM CORPORATION a corporation having its principal office at 16215 Alton Parkway P.O. Box 57013, Irvine, California 92619-7013 ("the Assignee")

WHEREAS:

- A The Assignor is the owner of a number of registered patents ("the Patents") and is the Applicant in respect of a number of patent applications ("the Applications"), short particulars of which are set out in Schedule 1 hereto.
- B On the 16th January 2001, the Assignor changed its name from Element 14 Inc to Broadcom UK Ltd and such change is evidenced by the Certificate of the Secretary of State of the State of Delaware contained in Exhibit 1 hereto.
- C The Patents and the Applications are recorded with the relevant patent offices in the Assignor's former name, Element 14 Inc.

NOW THIS ASSIGNMENT WITNESSES as follows:

- 1 In consideration of the sum of \$1 now paid by the Assignee to the Assignor (receipt of which the Assignor hereby acknowledges), the Assignor hereby assigns to the Assignee the Patents and the Applications, the right to apply for patent or similar protection in relation to the Applications in any part of the world (including the right to rely on any convention priority period) and the right to sue for and recover damages in respect of all infringements and threatened infringements of the Patents and the Applications prior to the date hereof.
- 2 At the request and cost of the Assignee, the Assignor shall without reasonable delay at any time execute any further documents and carry out any acts reasonably required to give effect to this assignment.
- 3 This assignment may be executed in one or more counterparts in which event all of said counterparts (including facsimile copy) shall be deemed to constitute one original of this agreement.
- 4 This assignment shall be governed by California law and the parties hereto submit to the non-exclusive jurisdiction of the Courts of California.

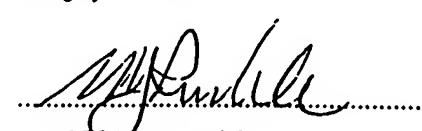
In witness whereof the parties hereto have executed this assignment on the day and year first above written.

Executed as a deed,  
For and on behalf of Broadcom UK Ltd  
acting by an Officer

Executed as a deed  
for and on behalf of Broadcom Corporation  
acting by an Officer



Stan Boland



William Ruehle  
Vice President & CFO

**SCHEDULE**

**DO NOT FORWARD  
TO ASSIGNMENT BRANCH  
NOT FOR RECORDATION**

**Schedule of Granted Patents in the name of Element 14 Inc**

Reference No	Title	Date Granted
GB Patent 2269514	RFI Reduction	6 March 1996
GB Patent 2269249	Clock Speed Selection	1 November 1995
GB Patent 2267624	Acorn Reply	20 September 1995
US Patent 5497434	Acorn Replay	5 March 1996
GB Patent 2245743	Grey Scaling on Simple Matrix LCD's	20 July 1994
US Patent 5400044	Grey Scaling on Simple Matrix LCD's	21 March 1995
UK Patent 2343808	Memory Access Enhancement	3 January 2001

**Schedule of US Applications Element 14 Inc**

Application No	Date
09/212,567	16 December 1998
09/273,722	22 March 1999
09/438,361	13 November 1999
09/395,297	13 September 1999
09/395,295	13 September 1999
09/395,294	13 September 1999
09/395,298	13 September 1999
09/395,296	13 September 1999
09/703,837	1 November 2000
09/651,799	30 August 2000
09/686,784	10 October 2000
09/692,656	19 October 2000
09/634,750	9 August 2000
09/759,832	12 January 2001

NOT FORWARD  
GMENT BRANCH  
RECORDATION

Schedule of British Applications Element 14 Inc

Application No	Date
9929828.3	16 December 1998
0000738.5	13 January 2000
9917127.4	21 July 1999
9916564.9	14 July 1999
9916566.4	14 July 1999
9917129	21 July 1999
9917126.6	21 July 1999
0015092.0	20 June 2000
9929442.3	13 December 1999
0018490.3	27 July 2000
0020624.3	21 August 2000
0021438.7	31 August 2000
0015236.3	21 June 2000
0017726.1	19 July 2000

Schedule of PCT Applications Element 14 Inc

Application No	Date
PCT/GB00/01083	22 March 2000
PCT/GB01/00116	12 January 2001
PCT/GB/00/02441	26 June 2000
PCT/GB00/02765	18 July 2000
PCT/GB00/04761	12 December 2000